

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A method for translating an animation vector to a target mix vector, the method comprising:

generating a calibration vector; and

mapping the animation vector to the target mix vector using the calibration vector and using an interpolation in the animation vector between target points.

2. (Previously Presented) The method of claim 1 wherein mapping the animation vector to the target mix vector using the calibration vector includes automatically performing the mapping.

3. (Previously Presented) The method of claim 1 wherein mapping the animation vector to the target mix vector using the calibration vector includes multiplying the animation vector by the calibration vector, which comprises a diagonal matrix.

4. (Previously Presented) The method of claim 1 wherein mapping the animation vector to the target mix vector includes using a linear mapping technique.

5. (Previously Presented) The method of claim 1 wherein mapping the animation vector to the target mix vector includes mapping by using a set of basis functions as input, including using radial basis function mapping.

6. (Previously Presented) The method of claim 5, further comprising:  
dividing targets into independent groups of target points; and

applying different mapping algorithms to different groups of target points.

7. (Previously Presented) The method of claim 1, further comprising using audio-visual sensing to track facial features for the animation vector.

8. (Canceled)

9. (Currently Amended) ~~The article of manufacture of claim 8 wherein the machine-readable medium further includes instructions stored thereon to cause the processor to translate the animation vector to the target mix vector by~~ An article of manufacture, comprising:

a machine-readable medium having instructions stored thereon to cause a processor to translate an animation vector to a target mix vector, by:

generating a calibration vector; and

automatically mapping the animation vector to the target mix vector using the calibration vector and mapping using an interpolation in the animation vector between target points.

10. (Currently Amended) ~~The article of manufacture of claim 8 wherein the instructions to automatically map the animation vector to the target mix vector using the calibration vector includes instructions to multiply~~ An article of manufacture, comprising:

a machine-readable medium having instructions stored thereon to cause a processor to translate an animation vector to a target mix vector, by:

generating a calibration vector; and

automatically mapping the animation vector to the target mix vector using the calibration vector by multiplying the animation vector by the calibration vector, which comprises a diagonal matrix.

11. (Currently Amended) ~~The article of manufacture of claim 8 wherein the instructions to automatically map the animation vector to the target mix vector using the calibration vector includes instructions to map~~ An article of manufacture, comprising:

a machine-readable medium having instructions stored thereon to cause a processor to translate an animation vector to a target mix vector, by:

generating a calibration vector; and

automatically mapping the animation vector to the target mix vector using the calibration vector by mapping using a set of basis functions as input.

12. (Currently Amended) The article of manufacture of claim 11 wherein the instructions to map using the set of basis functions as input includes instructions to use linear mapping.

13. (Previously Presented) The article of manufacture of claim 11 wherein the instructions to map using the set of basis function as input includes instructions to use radial basis function mapping.

14. (Previously Presented) A system for translating an animation vector to a target mix vector, the system comprising:

a means for generating a calibration vector; and

a means for automatically mapping the animation vector to the target mix vector using the calibration vector and using an interpolation in the animation vector between target points.

15. (Previously Presented) The system of claim 14 wherein the means for automatically mapping the animation vector to the target mix vector using the calibration vector includes a means multiplying the animation vector by the calibration vector.

16. (Previously Presented) The system of claim 14, further comprising a means for visually sensing to track facial features for the animation vector.

17. (Previously Presented) The system of claim 14 wherein the means for mapping the animation vector to the target mix vector includes a means for mapping by using a set of basis functions as input.

18. (Previously Presented) The system of claim 17 wherein the means for mapping by using the set of basis functions as input includes a means for mapping using a radial basis function.

19. (Previously Presented) The system of claim 14 wherein the means for mapping the animation vector to the target mix vector includes a means for mapping using a linear mapping technique.

20. (Previously Presented) The system of claim 14, further comprising additional means for cooperating with the animation vector, calibration vector, and target mix vector to animate a head image.